

The invention claimed is:

1 1. A method of scheduling a quality of service level to an end user's data transmitted
2 from a base station comprising the steps of
3 establishing a table of the quality of service levels designated by each end user,
4 receiving at the base station requests from at least two end users for data at selected rates,
5 for each end user,
6 determining the average data rate received by an end user during a fixed interval of time,
7 dividing the indicated rate by the average rate to obtain a result,
8 combining the result with the quality of service level designated by the user to obtain a
9 sum, and
10 using the sum to select an end user to receive data.

1 2. The method of claim 1 further comprising the step of selecting the end user that has
2 the highest sum as the receiver of data.

1 3. The method of claim 1 further comprising the step of obtaining a sum for each end
2 user each time there is a new transmission.

1 4. The method of claim 1 further comprising the step of maintaining the end user
2 selected as the receiver of data for a designated period to the exclusion of other end users.

1 5. The method of claim 1 further comprising the step of selecting each end user to
2 receive data in unequal increments.

1 6. The method of claim 1 further comprising the step of selecting each end user to
2 receive data in equal increments.

1 7. The method of claim 1 comprising the step of providing at least two quality of service
2 levels from which each end user can select.

1 8. The method of claim 1 wherein the step of determining the average data rate received
2 by an end user is over a period of time that is less than 10 minutes.

1 9. The method of claim 1 wherein the step of determining the average data rate received
2 by an end user is over a period of time that is greater than 9 minutes.

1 10. The method of claim 1 wherein the step of determining the average data rate
2 received by an end user is over an active period which is greater than 30 seconds and less than
3 3½ minutes.

1 11. A method of scheduling a quality of service level to an end user's data transmitted
2 from a base station comprising the steps of
3 establishing a quality of service level for each end user,
4 obtaining for each end user a result based on the amount of data previously sent to that
5 end user during a specified interval of time, and
6 combining, for each end user, the result with the quality of service level for each end user
7 to obtain a sum,
8 using the sum to determine the next end user to receive data.

1 12. The method of claim 11 wherein the result is based on the amount of data previously
2 sent to that end user during a specific interval of time.

1 13. The method of claim 12 further comprising the step of including a data rate
2 requested by the end user to obtain the result.

1 14. The method of claim 12 further comprising the steps of
2 dividing the amount of data sent to an end user during a specific interval of time by that
3 interval of time to obtain an average rate of data transmission, and
4 including the average rate of data transmission to obtain the result.

1 15. The method of claim 14 further comprising the step of
2 obtaining from the base station the data rate for transmitted data requested by an end
3 user, and
4 dividing the data rate requested by the end user by average rate of data transmission to
5 obtain a result.

- 1 16. The method of claim 15 wherein the interval of time is greater than 30 seconds.
- 1 17. The method of claim 15 wherein the interval of time is less than 10 minutes.
- 1 18. The method of claim 15 further comprising the step of conditioning the base station
- 2 to send data to the end user determined to be the next end user at the requested data rate and
- 3 requested quality of service level.